Nuclear Power

Tritium – an isotope of hydrogen – is not dangerous to humans externally, but is a radiation hazard when inhaled, ingested via food or water, or absorbed through the skin.

The report found that leaks of the radioactive substance were discovered at a staggering 75% of U.S. commercial nuclear power sites, in many cases leaking into nearby groundwater through corroded and I'll maintained pipes.

"Leaks from at least 37… facilities," found the report, "contained concentrations [of Tritium] exceeding the federal drinking water standard — sometimes at hundreds of times the limit."

To date, however, the leaks have reached only a handful of actual drinking wells, and then not at levels considered by regulators to be dangerous for human consumption. Scientists note, however, that it can be difficult to determine just how extensive leaks actually are, as Tritium moves very quickly through soil, and often indicates the presence of more powerful radioactive isotopes.

"Any exposure to radioactivity," notes AP National Writer Jeff Donn, "no matter how slight, boosts cancer risk, according to the National Academy of Sciences."

Nuclear Power and Climate Change:

The AP findings on radioactive leaks have cast new doubts on Nuclear Power's safety, particularly after the Japanese Fukushima plant disaster. Despite the safety concerns, however, Nuclear Power advocates continue to insist that Nuclear Powers benefits - particularly its low-carbon footprint – outweigh its risks.

The debate is more relevant than ever, as scientists are reporting that we can expect ever-increasing extreme weather as a result of climate change.

"We can make the statement that particular events would not have happened the same way without global warming," says Kevin Trenberth, head of climate analysis at the National Center for Atmospheric Research (NCAR) in Boulder, Colo.

"Normally," comments John Carey of Scientific America, "floods of the magnitude now being seen in North Dakota and elsewhere around the world are expected to happen only once in 100 years. But one of the predictions of climate change models is that extreme weather—floods, heat waves, droughts, even blizzards—will become far more common."

"[It's] not just that we've become more aware of disasters like North Dakota or last year's Nashville flood," Carey continues, "which caused $13 billion in damage, or the massive 2010 summer monsoon in Pakistan that killed 1,500 people and left 20 million more homeless. The data show that the number of such events is rising."

Because the realities of climate change is becoming increasingly concrete – and violent – people are clamouring to find solutions.

But does solving the climate crisis mean we have to trade one form of environmental destruction for another? Are cataclysmic meltdowns and skyrocketing cancer rates the price we have to pay in order to stave off a devastating rise in global temperature?

Technology is not the most important solution:

Our society is enamored with technology and its apparent ability to solve nearly every problem that comes along our way.

From the MRI’s which scan our brains for early diagnosis of cancers, to the sewing machine that saves the home sewer from intense labor, it seems like there has been a machine which has come along to help us.

It is hardly a surprise, then, that our knee jerk reaction to climate change is to unleash our inventors on it.

But in our battle to restore the planet to its former, healthier self, we must confront the driving force behind its decay: the economic system which mandates growth, capitalism.

A capitalist economy is simply not compatible with responsibly eliminating its CO2 emissions.

The institutions which comprise this economy - corporations, government agencies, regulatory bodies and banks - must grow. They must grow their markets, their manufacturing base, their cities, their control. Not to do so means being made redundant by their competitors.

Data from the U.S. Energy Information Administration
It is no wonder, then, that our demand for energy continues to grow far beyond our planets capacity to sustain it. The only recent respite from sky-rocketing green house gas emissions, in fact, occurred in 2008, largely because of the recession – in other words, because our economy was failing to live up to even its own needs.

It is a telling comment on the nature of this economy that from the earths perspective, recessions are rather positive developments.

For the full, original article, feel free to visit the Trial by Fire.